

IN THE CLAIMS:

1. (Currently Amended) An approval authority registration system which comprises terminals, a database, and a database management apparatus interconnected via a network, wherein one or more pieces of approval relation information, each of which indicates a relationship between an approval-authorized person and an approval object person who are both 5 users of the approval authority registration system and indicates an effective period of the relationship, have been registered with the database, wherein

the database management apparatus includes:

a receiving unit configured to receive, from a user via a terminal, a registration request requesting registration of a new piece of approval relation information with the database;

10 a first judging unit configured to judge whether the user who input the registration request matches either an approval-authorized person or an approval object person specified in the requested piece of approval relation information;

15 a second judging unit configured to, only when the first judging unit has judged that the user matches neither the specified approval-authorized person nor the specified approval object person, judge whether there is a no-approval-authorized-person period between an effective period indicated by the new piece of approval relation information and an effective period indicated by a piece of approval relation information which is one of the one or more pieces of approval relation information having been registered with the database and indicates a same approval object person as the new piece of approval relation information; and

20 a registration unit configured to register the new piece of approval relation information with the database

when the second judging unit has judged that there is no no-approval-authorized-person period, and provide a warning that there is the no-approval-authorized-person period and prevent the new piece of approval relation information from being registered with the database

25 when the second judging unit has judged that there is the no-approval-authorized-person period.

2. (Previously Presented) The approval authority registration system of Claim 1,

wherein

the database includes an attribute database with which user attribute information showing attributes of the users is registered,

5 the first judging unit further judges whether an attribute of the user who input the registration request satisfies a predetermined condition by referring to the user attribute information, and

the second judging unit judges whether there is the no-approval-authorized-person period when the first judging unit has judged that the attribute of the user satisfies the 10 predetermined condition.

3. (Previously Presented) The approval authority registration system of Claim 2,

wherein

the first judging unit further judges whether an attribute of the specified approval-authorized person satisfies a predetermined condition by referring to the user attribute 5 information, and

the second judging unit judges whether there is the no-approval-authorized-person period when the first judging unit has judged that the attribute of the specified approval-authorized person satisfies the predetermined condition.

4. (Previously Presented) The approval authority registration system of Claim 1, wherein

the receiving unit further receives, from a user via a terminal, a registration request requesting registration of a piece of approval relation information specifying a proxy approval-authorized person,

the first judging unit further judges whether the user who input the latter registration request matches an approval-authorized person indicated by a piece of approval relation information that has already been registered with the database, and

the registration unit registers the latter piece of approval relation information with the database if the judging unit judges that the user who input the latter registration request matches the approval-authorized person indicated by the already-registered piece of approval relation information.

5. (Previously Presented) The approval authority registration system of Claim 4,

wherein

each piece of approval relation information further includes user information that indicates a user who input a registration request requesting registration of the piece of approval relation information, and

the database management apparatus further includes:

a storage unit configured to store a list of notification destinations respectively corresponding to the users of the approval authority registration system;

10 a monitoring unit configured to monitor, at regular intervals, one or more effective periods respectively indicated by one or more pieces of approval relation information which, among the one or more pieces of approval relation information having been registered with the database, specify proxy approval-authorized persons; and

15 a notification unit configured to, if when the monitoring unit has judged that one of the monitored one or more pieces of approval relation information has an effective period that expires within a predetermined range of days, notifies a notification destination corresponding to a user indicated by the one of the monitored one or more pieces of approval relation information, of the judgment result by the monitoring unit.

6. (Previously Presented) The approval authority registration system of Claim 1, wherein

the registration unit further registers a piece of update history information with the database each time a user newly registers or updates a piece of approval relation information,

5 the receiving unit further receives, from a user via a terminal, a request to obtain a piece of update history information, and

the database management apparatus further includes

10 a history information distribution unit configured to read the requested piece of update history information from the database and distribute the read piece of update history information to the terminal.

7. (Previously Presented) The approval authority registration system of Claim 1,
wherein

the receiving unit further receives an approval request from a user via a terminal,
and

5 the database management apparatus further includes:

an identifying unit configured to identify, by referring to approval relation information registered with the database, an approval-authorized person to whom the user, as an approval object person, corresponds;

an approval request distribution unit configured to distribute the received approval 10 request to the identified approval-authorized person;

an obtaining unit configured to obtain approval information, which indicates an approval or a denial by the approval-authorized person in response to the approval request, from the approval-authorized person via a terminal; and

an approval information distribution unit configured to distribute the obtained 15 approval information to the user who sent the approval request.

8. (Currently Amended) The approval authority registration system of Claim 1,
wherein

each piece of approval relation information to be registered and having been registered with the database includes responsible person classification information that indicates 5 whether an approval-authorized person specified in the piece of approval relation information is a responsible person or proxy, wherein

if the receiving unit receives a piece of approval relation information with responsible person classification information indicating that an approval-authorized person is proxy, the first judging unit judges whether the user who input a registration request requesting 10 registration of the received piece of approval relation information matches a responsible person indicated by a piece of approval relation information that has already been registered with the database, and

the second judging unit judges whether there is the no-approval-authorized-person period when the first judging unit has judged that the user who input the registration request 15 matches the responsible person.

9. (Cancelled)

10. (Previously Presented) An approval authority registration method for use in a database management apparatus comprised in an approval authority registration system which comprises terminals and a database as well, and registers approval relation information with the database, wherein the database management apparatus, the terminals, and the database are 5 interconnected via a network, and one or more pieces of approval relation information, each of which indicates a relationship between an approval-authorized person and an approval object person who are both users of the approval authority registration system and indicates an effective period of the relationship, have been registered with the database, wherein

the approval authority registration method includes:

10 a receiving step for receiving, from a user via a terminal, a registration request requesting registration of a new piece of approval relation information with the database;

a first judging step for judging whether the user who input the registration request matches either an approval-authorized person or an approval object person specified in the requested piece of approval relation information;

15 a second judging step for, only when the first judging step has judged that the user matches neither the specified approval-authorized person nor the specified approval object person, judging whether there is a no-approval-authorized-person period between an effective period indicated by the new piece of approval relation information and an effective period indicated by a piece of approval relation information which is one of the one or more pieces of
20 approval relation information having been registered with the database and indicates a same approval object person as the new piece of approval relation information; and

25 a registration step for registering the new piece of approval relation information with the database when the second judging step has judged that there is no no-approval-authorized-person period, and providing a warning that there is the no-approval-authorized-person period and preventing the new piece of approval relation information from being registered with the database when the second judging step has judged that there is the no-approval-authorized-person period.

11. (Cancelled)

12. (Previously Presented) A computer-readable recording medium recording therein an approval authority registration program for use in a database management apparatus comprised in an approval authority registration system which comprises terminals and a database as well, and registers approval relation information with the database, wherein the database management apparatus, the terminals, and the database are interconnected via a network, and one

or more pieces of approval relation information, each of which indicates a relationship between an approval-authorized person and an approval object person who are both users of the approval authority registration system and indicates an effective period of the relationship, have been registered with the database, wherein

the approval authority registration program includes:

a receiving instruction for receiving, from a user via a terminal, a registration request requesting registration of a new piece of approval relation information with the database;

a first judging instruction for judging whether the user who input the registration request matches either an approval-authorized person or an approval object person specified in the requested piece of approval relation information;

a second judging instruction for, only when the first judging has judged that the user matches neither the specified approval-authorized person nor the specified approval object person, judging whether there is a no-approval-authorized-person period between an effective period indicated by the new piece of approval relation information and an effective period indicated by a piece of approval relation information which is one of the one or more pieces of approval relation information having been registered with the database and indicates a same approval object person as the new piece of approval relation information; and

a registration instruction for registering the new piece of approval relation information with the database when the second judging has judged that there is no no-approval-authorized-person period, and providing a warning that there is the no-approval-authorized-person period and preventing that new piece of approval relation information from being registered with the database when the second judging has judged that there is the no-approval-authorized-person period.

13. (Previously Presented) The approval authority registration system of Claim 1, wherein in the one or more pieces of approval relation information, the approval-authorized person is defined as a superior of the approval object person and the approval object person is defined as a subordinate of the approval-authorized person.